

"Runyon, Tim"

To: REBECCA FREY <Runyon@idns.state.ii. Subject: residential water samples in West Chicago</p>

06/12/2003 04:16 PM

As a follow up to our recent discussion regarding residential water sampling in at residential sites in West Chicago I'd offer the following. After the 1989 DOE flyover IDNS was conducting ground level gamma surveys to confirm aerial survey results. Since we were accessing private properties, some of the owners expressed concern over possible contamination in their private wells. Whenever a homeowner requested that we sample their well, we would honor that request and collect a sample for gross alpha and gross beta screening. The gross screening method is a reasonably inexpensive means of determining if there is any radioactivity present, before attempting the more complex and time consuming analysis for radium. Although I don't have specific numbers off the top of my head, I would guess that sampled on the order of 20 or more private wells and to date we have never found radioactivity at levels above the IDNS radiochemistry lab's lower limit of detection (LLD). The LLD's for the lab are generally around 3-5 pCi/1, which are below the screening levels for drinking water.

Since we have never identified radioactive contaminants in private wells, even private wells located on properties known to be contaminated with thorium, we have never found it necessary to conduct a formal study of residential wells in West Chicago. If you have questions about a specific site or address, please let me know. Thanks,

TR

